

INSTITUTO BIOLOGICO

CAIXA POSTAL, 2821
SÃO PAULO - BRASIL

MH16 WS

*Thank you, it's
a good letter and I
have sent it to the
us at the same time
as I have to the
wide buyers
H.M.*

Dear Mr. Ince:

*This may interest you. It looks
like the beginning of a good piece of
work. I'd be glad to have the letter back
eventually.* With best wishes for a good
summer.

São Paulo, May 26th, 1942.

*Sincerely,
Ince.*

Dr. M. Heidelberger
Columbia University
College of Physicians and Surgeons
620 West 168th Street
New York.

Dear Dr. Heidelberger:-

RECEIVED

JUN

Ever since I arrived, I have had the desire to write you, but the letter was postponed in order that you might receive news not only about myself, but also about my work.

As you probably have heard, I came back by boat and after a rather exciting 30 days trip I finally arrived in Rio. Unfortunately, part of my baggage which had been shipped ahead on another steamer, since I at first had thought of returning by plane, has been lost, but it is better the baggage than myself, although the sharks don't think the same way.

After my arrival, I spent almost one whole month to adapt my laboratory to good conditions of work, as I wanted to continue the researches along the same lines as in your laboratory. I therefore had to teach my negro how to wash the glasses and to take care of the pipettes according to Mary's technique; the Micro-Kjeldahl also had to be readjusted and so on. Now the conditions are satisfactory (except rubber caps and good Pyrex test tubes we cannot get here) and I have made some quantitative titrations of complement in beef serum.

The results I have obtained so far are summarized below.

1) Pneumo III System: SIII 1 mg in 25 ml. saline; Serum B-69 1 → 5.

	SIII	Serum	Beef Serum fresh	Beef Serum 56° 1 1/2 hr	Saline	ml. n/70 HCl
Salt	1	1	-	-	5	2.05
	1	1	-	-	5	2.05
	1	1	-	-	5	2.10
C'	1	1	5	-	-	3.15
	1	1	5	-	-	3.15
iC'	1	1	-	5	-	2.20
	1	1	-	5	-	2.28
	1	1	-	5	-	2.39
C'IIIBl	-	1	5	-	-	.38
C'SerBl	1	-	5	-	-	.15
iC'IIIBl	-	1	-	5	-	.21
iC'SerBl	1	-	-	5	-	.25

This experiment gave ca. 0.165 mg N for 5 ml. of beef complement, a value of the same order of that obtained for guinea-pig complement. In this experiment I have used beef serum from the same day of bleeding, but

having observed that after 24 hours in the ice-box a large precipitate was found, I decided to use the complement after centrifuging off that precipitate, in order to avoid the high values obtained for the blanks.

2) Also, Pneumo III System: SIII 1 mg/25 ml saline; Serum 1→6.

	SIII	Serum	Beef Serum (fresh)	Beef Serum 56°1/2 hr	Saline	ml. n/70 HCl.
Salt	1	1	-	-	5	2.01
	1	1	-	-	5	2.01
	1	1	-	-	5	2.05
C'	1	1	5	-	-	2.85
	1	1	5	-	-	2.84
	1	1	5	-	-	2.80
iC'	1	1	-	5	-	2.15
	1	1	-	5	-	2.17
C'Ser Bl	-	1	5	-	-	0.11
C'IIIBl	1	-	5	-	-	0.00
iC'Ser Bl	-	1	-	5	-	0.09
iC'III Bl	1	-	-	5	-	0.14

C' in 5 cc. of beef complement : 0,146.

3) In a third experiment, by using the egg albumin system, values of the same order have been obtained and the dilution effect (with 4 and 8 ml. portions of complement) has been verified.

Titration of C'1 (according to Hegedus, beef serum has 1600 units of C'1, 100 C'3 and no 2 and 4) in the original complement and in the C'Supernatant gave the following result (by using 0,1 of the reagent 234, a mixture of 9 parts of Endpiece 1/10 + 1 part of guinea-pig serum heated 15 minutes at 56° C):

C'1 in original beef complement - 500 units
C'1 in C' Supernatant - 0 (not anti-complementary).

I think these results are significant and should like to have your critic about the same, as well as suggestions for further work. I also would be very grateful if you could send me by airmail some 40 ml. of Pneumo III Serum, in order that I would not have to interrupt the work while waiting for the rabbits I am immunizing now.

I always remember the pleasant stay at your laboratory and the friendly spirit of everybody - Treffer's politeness, Manfred's frank collaboration at any time (except at the time of the seminar...), the agreeable neighborliness of Mrs. Mc.Pherson, the sweetness of Mary and the teaching qualities of Soo Hoo, particularly at the Chinese restaurants! Please give to all my best regards.

I hope you and Mrs. Heidelberg are well and that you will soon be able to visit us in Brazil, where she will certainly find some new lamps for her collection.

With kindest regards to you and Mrs. Heidelberg,

Sincerely yours,

O'Her.